



New Business Models for Installing DG and CHP

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The RealEnergy Business Mission

It is the RealEnergy mission to assess, advocate and act to develop, own and operate onsite energy generation systems. We sell power and deploy distributed generation DG/combined heat and power (CHP) technologies that:

- **provide power pricing indexed to the best available price**
- **provide a new revenue stream as a tenant, we pay percentage rent**
- **provide 'cleaner than grid' and 'more reliable than grid' power**
- **provide supplemental thermal energy (hot and chilled water)**
- **provide selective back-up and power quality services**

*Immediate economic and environmental benefits
.... All at no cost or operating risk to Facility Owners!*



Basic Business Terms

Energy Services Agreement & Lease

- Term: 15 Years
- Access Fee: 7.5% of gross sales in offices, 10% housing, hospitality, data centers and industrial
- Electric Price: Indexed to utility price for delivered power
- Thermal Price: Measured in therms ($\text{fuel price} \times \text{therms used} / \text{boiler efficiency}$)
- Service: Ancillary electric, heat and power. Exclusive provider of DG
- Rights: Combined leasehold and energy services contract ("LESA")
- Priority: First energy purchased by facility
- Standby Power: Option provided by side letter.



Owner and Tenant Benefits

Owners

- No capital outlay
- No technology risk
- Constructive use of unused space
- New and durable revenue source
- Peak demand/peak price load reductions for load shaping and effective commodity management
- Reduce grid uncertainty
- Respond to investor and tenant demand for energy solutions and management
- Positive environmental statement
- Enhance HVAC infrastructure and capacity

Tenants

- Potential standby services
- Comfort: Additional cooling and heating capacity
- Opex: Load shaping supports lower commodity costs for residual load – reduced CAM
- Capex: Reduced building outlays and passthroughs
- Increased power quality
- Environmental Solution





RealEnergy Owners/Investors

RealEnergy is owned by some of the country's foremost institutional and individual energy and real estate investors: These property owners control over one billion square feet of institutional grade real estate and include:

- GFI Energy Ventures
- CalPERS (through CBRE and CommonWealth Partners)
- Real Estate Owners/Operators
 - Publicly traded REIT's
 - Pension fund advisory firms
 - National/Regional Developers/Investors/Operators
- Detroit Edison
- Rothschild





RealEnergy Clients

Advisors	Pension Funds	Private Operators	REITs	Hotels	State/Muni
AEW	Alaska Permanent Fund Corporation	Amstar	Arden Realty	Marriott Corp.	State of California Department of General Services
CB Richard Ellis	Bayernfonds	Divco West		Viceroy	
CommonWealth Partners	CalPERS	Ensemble Investments			
Lend Lease	CalSTRS	Fremont Properties			
Lubert Adler	Government of Singapore	KOR Group			
RREEF	Harvard Endowment	Layton-Belling & Assoc.			
Starwood Capital		Southwest Value Partners			
Transwestern		Tower Realty			
Walton Street		Trammell Crow			





Distributed Generation Facts

- Distributed Generation – Combined Heat & Power (CHP)
 - Includes Electric/Thermal Energy Generated At The Point Of Consumption
 - RealEnergy owns Natural Gas Engines, MicroTurbines, Solar PV
 - Generates Tangible Immediate Savings (Rent)
 - Two to Three Times More Efficient Than Centralized Power Plants
 - Major Focus Of The Presidential Energy Plan
 - Security of Supply, Less Vulnerable Than Centralized Power Plants
 - Relieves Generation and Transmission Constraints – Avoid Losses
 - Can Be Deployed Quickly
 - Environmentally Responsible
 - Creates Jobs, Promotes Utility Competition
 - Reduces Fuel Import Dependency
 - Platform For High Reliability and Power Quality – Smooth Sags/Surges
 - DOE – 10 Years, 10% of Electricity from DG
 - For High Peak Period Users Unable To Effectively Reduce Demand
 - Onsite Generation IS Demand Reduction
-



Distributed Generation Technologies

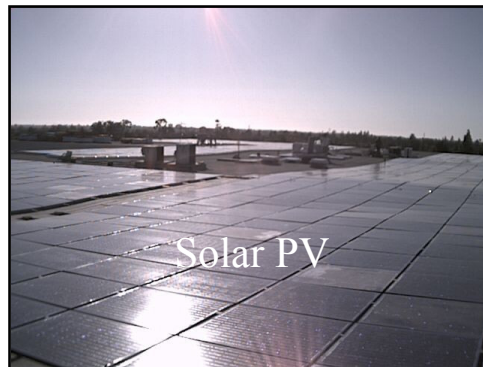


Highly efficient, natural gas burning internal combustion engines provide the backbone of RealEnergy's distributed generation network. Cutting-edge "cogeneration" technology, allows the recovery of the maximum amount of heat from the engine while it generates electricity. This thermal energy is then used onsite for both heating and cooling applications.

Employing jet engine technology, microturbines can deliver clean power from a wide variety of fuels, with superior safety and emissions. Microturbines also generate exhaust heat energy, which can be exploited in "cogeneration" applications, allowing the systems to achieve higher efficiency while reducing electricity demands.



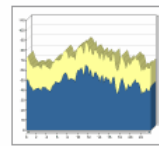
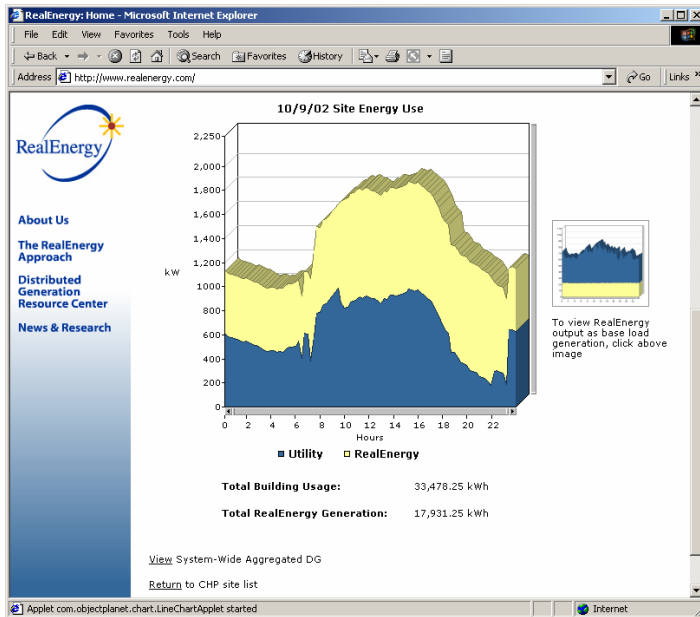
By using the most abundant resource available – sunlight – solar energy is converted directly into electricity. Southern California enterprises are well-suited for this resource, receiving almost twice the sunlight as other regions in the U.S. Using flat-plate photovoltaic modules, RealEnergy's solar-powered facilities are among the largest privately owned and operated in North America.





Actual 1000 kW Performance – Two Views

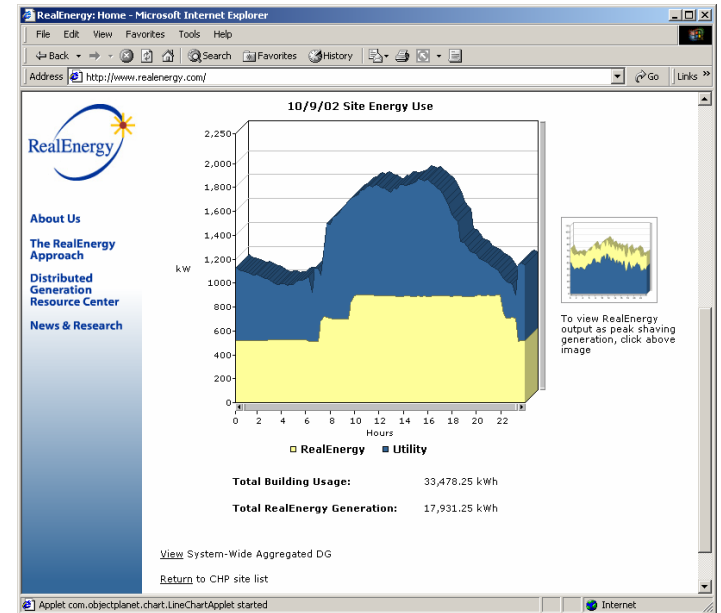
Peak-Shaving View



To view RealEnergy output as peak shaving generation, click above image

A toggle switch allows the user to view the same data in two formats

Base Load View



To view RealEnergy output as peak shaving generation, click above image



RealEnergy Properties – Operating



CPUC



City Center Solar (Two properties)



Skypark



Imperial Bank Tower



Viceroy Hotel



Civic Center



Genessee



Wells Fargo Plaza



Centerside



5200 West Century



100 Oceangate



Two Town Center



RealEnergy Properties – Under Construction



DGS



Walton/SCS Advisors



Transwestern



RREEF



Arden – Phase Two



Trammell Crow



RealEnergy Properties – Under Construction



Regents Square I & II



50 Beale Street



199 Fremont



19000 MacArthur



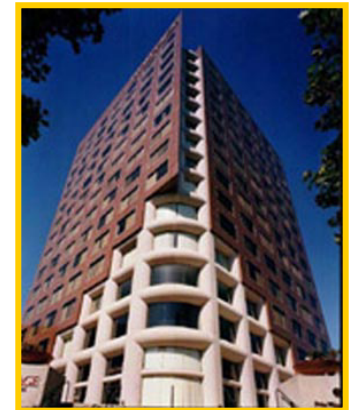
444 W. Ocean



100 Park Avenue

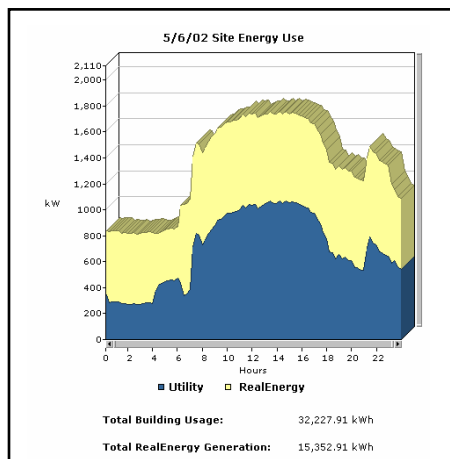


110 W. A Street

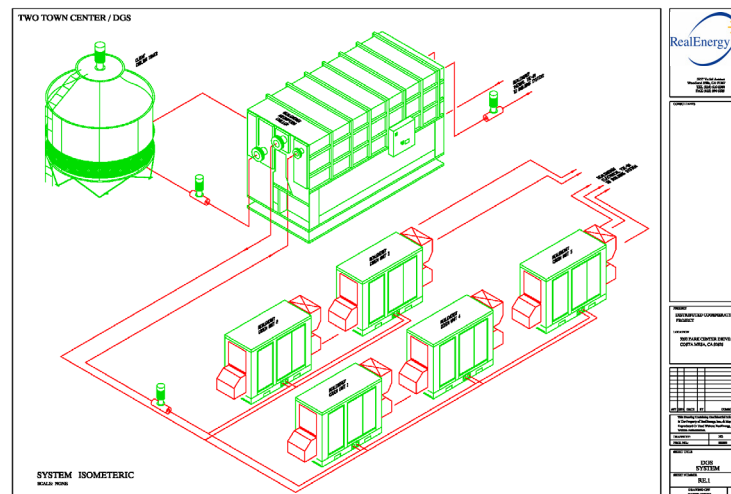


150 Almaden

Two Town Center – Fact Sheet



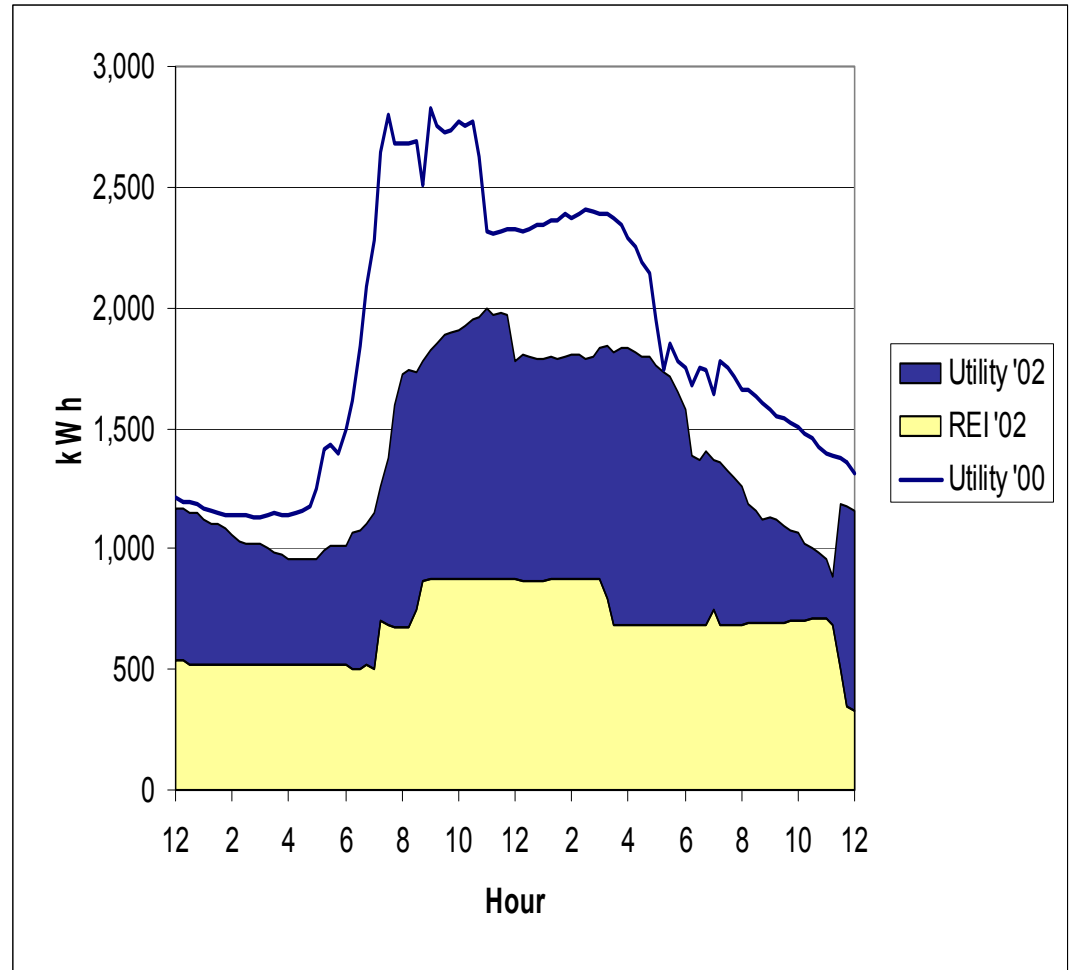
- **Operator:** Commonwealth Partners
- **Owner:** Fifth Street Properties
- **Partner:** CalPERS
- **System Size:** 1000 kW – (5) 200kW generators
- **Building Size:** 714,000 square feet
- **Type:** Heat recovery with absorption chiller – 275 tons
- Provides approximately 69% of building's total electric requirement
- Future capability to provide 75% of building's hydronic heating requirement
- Provides 50% of building's chilled water requirement
- 98% reduction in NOx emissions
- Access fee provides substantial capital and operational expense savings
- Potential for blackout protection to building load or specific tenant load
- Load shaping to drive more effective commodity purchases





Two Town Center – Peak Reduction

2000 Utility Peak	2.8 MW
2002 CHP Peak Reduction	.8 MW
2002 Utility Peak	1.1 MW
2002 RealEnergy Peak	.9 MW



Barriers to Entry

RealChallenges – “Don’t Try This At Home”

- Entitlements (air, building & interconnection)
- Utility tariffs (standby, exit fees, rate design)
- Choosing right technology & manufacturer
- Capital intensive
- Building integration (vibration, aesthetics)
- Keeping the profit/savings
- Scaling (systems, multiple locations)
- Optimizing thermal applications & system ops
- Inefficient commodity purchasing (gas, electricity)
- Surplus sales (ancillary services)





RealEnergy, Inc.

**Distributed Generation
and CHP technologies
are cornerstones of
the developing
National Energy Policy**



**RealEnergy has
taken these tenets
from concept to
reality recognizing
that customer
relationships are
key**

